NAME

grdsurface - Interpolate isosurface for a given grid

VERSION

Version 0.1

SYNOPSIS

grdsurface input_grd_file output_py_file [**-a** *alpha*] [**-c** *yzskip xzskip xyskip*] [**-f**] [**-g** *grid_filename min_value mid_value max_value min_color mid_color max_color*] [**-h**] [**-i** *scolor*] [**-n** *notice_level*] [**-o** *obj_name*] [**-t** *surface_type*] [**-u** *startcolor endcolor*] [**-v** *isovalue*] [**-z** *smooth_percent*]

DESCRIPTION

Interpolates the isosurface at *isovalue* and generates a Python scriptfor visualization of the surface in PyMol.

PARAMETERS

-a *alpha*

Set the transparency for the object (0-1). (1 is no transparency)

-c *yzskip xzskip xyskip*

Specify the spacing between the countours in each plane. The spacing is equal to skip*grid_resolution.

-f Flip the normals for the surface.

-g *grid_filename min_value mid_value max_value min_color mid_color max_color*

Color the surface based on the grid "*grid_filename*". The surface is colored between *min_value* and *mid_value* with a color gradient between *min_color* and *mid_color*. Likewise for the other range.

-h Print out the man page for help

-i *scolor*

Color the surface solid

-n *notice_level*

Set the degree of program output. Use:

-n 0 No output
-n 10 Normal program output
-n 20 Parameters useful for reproducing the results
-n 30 All output

-o *obj_name*

Specify the object name for pymol loading.

-t *surface_type*

Specify the surface type to be calculated. The default is solid. Supported types:

solid
triangles
points
trimesh
xyzmesh

-u *startcolor endcolor*

Color the surface by a meaningless gradient that starts in the +x, then +y, and finally +z directions from the minimum corner of the surface. This is the default option with *startcolor*=blue

-v *isovalue*

Specify the *isovalue* for interpolation. The default is zero.

-z *smooth_percent*

This option has the effect of 'smoothing' the surface by averaging any vertices that are within *smooth_percent**grid_resolution of each other. This also greatly reduces the number of triangles in the surface.

AVAILABLE COLORS

black
blue
brown
cmyk_blue
cmyk_marine
deep
forest
green
grey
hotpink
magenta
marine
orange
purple
red
slate
teal
wheat
white
yellow

AUTHORS

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